

FEDERAL COMMUNICATIONS INDIANA COMMISSION
Washington, D.C. 20554

In the Matter of)	
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Technology Transition Task Force)	GN Docket No. 13-5
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COMMENTS OF
THE INDIANA UTILITY REGULATORY COMMISSION
ON POSSIBLE TECHNOLOGY TRANSITION TRIALS

I. Introduction and Summary

The ongoing and continued evolution in telecommunication technology is critical to the quality of life, economic development and public safety in Indiana. The Indiana Utility Regulatory Commission ("Indiana Commission" or "IURC") respectfully submits these comments on certain aspects of the Federal Communication Commission's ("FCC's") Technology Transitions Policy Task Force Public Notice.¹ The Indiana Commission's comments in this docket mirror its previous comments on technology transition issues filed with the FCC in GN Docket NO. 12-353 ("Previous Comments"),² a copy of which is attached and incorporated by reference with these comments. The issues and considerations outlined in the Commission's Previous Comments represent the Commission's desired input to the FCC on the contemplated possible technology transition trials. The Indiana Commission now offers the comments below on federal and state cooperation on telecommunications issues and shares Indiana's positive experience with Next Generation 911("NG911") deployment.

¹ FCC Technology Transitions Policy Task Force Seeks Comment on Potential Trials, GN Docket No. 13-5, DA 13-1016.

² The IURC filed comments earlier this year on the consolidated National Telecommunication Cooperative Association ("NTCA") and AT&T petitions to initiate a rulemaking to examine the means of promoting and sustaining the ongoing evolution of the Public Switched Telephone Network from using legacy technology to next and future generations of technology. (GN Docket NO. 12-353)

II. Comments

A. Importance of Reliability Especially During Power Outages

The Indiana Commission addressed a number of areas in its Previous Comments submitted to the FCC regarding technology transition issues, which are incorporated by reference into these comments. No issue is more important than the continued, and even further hardened, reliability of telecommunications services. One area of particular importance is the reliability of telecommunications services in the event of public electric power outages. Both wireline and wireless telecommunications providers' networks depend heavily on robust and independent public electric power supplies. Most telecommunications service providers have their own backup power supplies available until public power can be restored. However, natural disasters, as was recently witnessed with Hurricane Sandy, can sometimes stretch backup power supplies well beyond their limits.

The possible technology transition trials may provide an opportunity to address the question *inter alia* of improving reliability of backup electric power in the telecommunications networks during public power outages. The National Association of State Utility Consumer Advocates recently passed a resolution urging state and federal regulators to develop enforceable policies to ensure reliable wireline and wireless communications are maintained during public power outages regardless of technology used to provide telecommunications services. In addition, at its upcoming summer meeting, the National Association of Regulatory Utility Commissioners ("NARUC") is expected to take up a similar resolution on the importance of reliable backup electric power supply for telecommunications services. The Indiana Commission also urges the FCC to ensure that any technology transitions, trials or otherwise, account for the vital importance of reliable electric power for telecommunication networks, whether PSTN or Internet Protocol (IP), and outline steps to improve the reliability of backup power supplies.

B. State Utility Commission's Role in Possible Technology Transition Trials

State commissions have a valuable role to play in any potential technology transition trials. State commissions are charged with balancing the interests of utilities and consumers. State commissions are also uniquely positioned with a local presence which allows them to be fully aware of and deal effectively with issues requiring consideration of different and sometimes competing interests. Considering that any technology transition trials must proceed with consideration for the interests of both affected carriers and consumers, the best outcomes for developing and conducting technology transition trials will be achieved when both the FCC and the states work together with carriers who would carry out such trials. The Indiana Commission welcomes opportunities to collaborate with the FCC in a cooperative federalism approach to technology transition trials.

The NARUC Federalism Task Force has produced a draft report titled Cooperative Federalism and Telecom in the 21st Century.³ That report, while still in draft form, provides a host of good ideas on improving the working relationship between the FCC, states and carriers and other industry participants. The Indiana Commission agrees that the FCC has an important role to play in developing overall standards for network reliability and availability. At the same time, state commissions provide “feet on the street” to understand consumer complaints and concerns. The Indiana Commission urges the FCC’s consideration of the NARUC report and commitment to working together with state commissions on technology transition trials, with each concentrating on their respective core competencies.

C. Indiana Experience with NG911

Indiana has experience with NG911 that the FCC should consider as it contemplates transition trials of this new technology. In 2006 Indiana created a statewide emergency calling network (IN911), serving wireless and VoIP providers that is connected to all wireline providers and all remaining legacy 9-1-1 providers. The IN911 network is a full Emergency Service Internet Protocol Network (ESInet) that has processed over 15 million calls. Tracking of live 911 calls and past 911 calls can be viewed at map.in911.net/map.

Public Safety Answering Points (PSAPs) in nineteen Indiana counties have the ability to send text message service outbound from the PSAP when a 911 call is originated from a text capable device (e.g. cell phone). Currently the ability to initially call a PSAP via text message is not yet available, but that functionality is in the works. Text messages sent from a PSAP use the same protocol and are displayed on a cell phone in the same manner as text messaging done between mobile phones as used every day by the public. Text messaging is used to send detailed instructions or phone numbers from PSAPs in response to silent or abandoned 911 calls and administrative follow-up. Overall, Indiana’s experience with NG911 has been positive with significant benefits clearly realized from the current NG911 system, with additional features and functionality on the way.

III. Conclusion

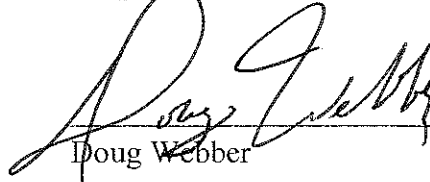
The Indiana Commission supports the FCC’s efforts to encourage transition in technology in telecommunications to make next generation networks and services and the associated benefits available to consumers. Technology transition trials would be beneficial in determining whether said transition would benefit customers or result in compromised reliability, reduced availability of service or an elimination of consumer options in telecommunications

³ NARUC published an initial report on Federalism and Telecom in July 2005.

services. The Indiana Commission welcomes the opportunity to collaborate with the FCC on any technology transition trials that would impact Indiana carriers and consumers.

The Indiana Commission appreciates the opportunity to offer its additional comments on the FCC's efforts to encourage continued technology transitions and looks forward to continuing dialogue with the FCC, other state commissions, industry, and consumer representatives to move forward in encouraging network technology transition in a technology-neutral manner, while protecting the interests of consumers and promoting competition.

Respectfully Submitted,



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FEDERAL COMMUNICATIONS INDIANA COMMISSION
Washington, D.C. 20554

In the Matter of

Technology Transition Task Force

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GN Docket No. 13-5

**ATTACHED PREVIOUS COMMENTS OF
THE INDIANA UTILITY REGULATORY COMMISSION
ON TECHNOLOGY TRANSITION ISSUES**

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
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Petition to Launch a Proceeding Concerning)	
the TDM-to-IP Transition)	GN Docket No. 12-353
Petition of the National Telecommunications Cooperative)	
Association for a Rulemaking to Promote and)	
Sustain the Ongoing TDM-to-IP Evolution)	GN Docket No. 12-353
)	

COMMENTS OF
THE INDIANA UTILITY REGULATORY COMMISSION
ON AT&T AND NTCA PETITIONS

I. Introduction and Summary

The Indiana Utility Regulatory Commission ("Indiana Commission" or "IURC") respectfully submits these comments on the separate petitions submitted by AT&T and National Telecommunication Cooperative Association (NTCA) on November 7, 2012, and November 19, 2012, respectively, in response to the FCC's Public Notice requesting such comments.¹ The Indiana Commission's comments provide its perspective on selected aspects of these petitions and the underlying issues.

The Indiana Commission encourages the FCC to explore the creation of technology-neutral regulatory changes that would encourage and accommodate not only the network transition from legacy technology to next generation forward-looking technologies, such as Internet Protocol (IP), but can also accommodate any other future technology as the technological evolution will continue and may accelerate. The evolution of wireless next generation technology provides just such an example of differing and competing telecommunication protocols with Worldwide Interoperability for Microwave Access (WiMAX) quickly followed by and largely eclipsed by Long Term Evolution (LTE). This would be similar to adopting as public policy certain standards favoring Beta Max technology over VHS because of its reputed advantages. At the same time, the FCC must still ensure that "quality service"² and "universal service"³ remain available, during this and successive transitions, for all consumers at "just, reasonable, and

¹ Public Notice: Pleading Cycle Established on AT&T and NTCA Petitions, GN Docket No. 12-353 (DA 12-1999, rel. Dec. 14, 2012).

² 47 U.S.C. 254(b)(1).

³ 47 U.S.C. 254(i).

affordable rates,”⁴ promoting competition and protecting the reliability and stability of both current and new networks during the transitions.

The IURC’s overriding concern in making these Comments is that all of Indiana must continue to have necessary and essential communication services, as well as those services and advances in technology that may assist in economic development. The Indiana Commission supports the goal of expanding the deployment of broadband networks and the provision of broadband and next generation communication services throughout Indiana, including, but not limited to, rural and high-cost areas in the state.⁵ However, it is important to remember that changes to existing federal policy affect consumers in Indiana and across the nation, who may benefit from those policies or be harmed by their elimination or modification, due to a reduction in available telecommunications provider options and therefore a reduction in competition.

The communications industry is a “networked” industry, similar to, among others, the airline industry. Close cooperation between airlines is imperative to ensure that ticketed passengers and cargo can transfer relatively easily and seamlessly from one airline to another on interconnected flights. It is important that the right to hold similar expectations regarding communications between competing communications providers be protected. These Comments should not be construed as advocating any hindrance to the competitive marketplace. On the contrary, the Indiana Commission’s comments are meant to be pro-competition.

II. Comments

A. Consumer Protection and Reliability

As the FCC moves forward with efforts to accelerate the transition of the Public Switched Telephone Network (PSTN) to more modern and efficient network technology, such as Internet Protocol, it should take great care to ensure that negative impacts of such an accelerated transition to consumers are minimized. Consumers should not have to give up the choice, affordability, and reliability of basic voice service, when the PSTN evolves to the next generation of network technology and the new services that new technology can provide.

1. Preservation of Service Reliability

Traditional telephone service is simple in its operation and functionality. What it lacks in complexity is offset by high reliability. Traditional phone service and customer premise equipment (e.g. telephone handset) are powered through the copper telephone line that runs to a customer’s location. This configuration allows for continued telephone service availability even if the customer and/or the central office /head-end loses conventional electrical power. The FCC should ensure that it gives full consideration to both expectations and deliverables in customer service reliability prior to taking action to accelerate the transition to new technology.

⁴ 47 U.S.C. 254(b)(1) & 254(i).

⁵ 47 U.S.C. 254(b)(3).

2. Choice of Stand-alone Voice Service Option

Next generation network technologies offer much promise for additional functionality and services. However, some customers may desire only voice service, and that may be all that some low-income consumers can afford, Lifeline notwithstanding. The transition to newer network technology should not result in a customer being forced to purchase additional or more advanced services that they do not desire in order to have voice service.

Equally, customers should not face the prospect of losing service altogether because the switch to next generation technology would make it uneconomical to serve some customers. The transition to the next generation of network technology must accommodate both the preservation of voice service as an option for customers who desire it and the availability of advanced services for those who want the newer technology.

3. Freedom from Requiring New Equipment

Customers who desire to purchase only voice service after the transition to the next generation of network technology should be able, to the maximum degree possible, to retain their existing customer premise equipment (CPE) which uses traditional technology. The PSTN has migrated through successive waves of evolutionary technology for over 100 years. There is a significant installed base of legacy CPE, such as telephones and fax machines, based on this traditional technology.

The FCC should consider how upgrades in network technology may place burdens on customers to replace existing CPE, and how such upgrades could affect low-income consumers. The FCC should consider the importance of backward-compatibility of the network upgrades with existing and prior technologies, such as is found with new versions of computer software programs that will accept work product produced using computer programs of an older generation. If the FCC elects to adopt a mandatory cut-over date for converting to a next generation network and services, it should also provide a glide path for replacing CPE, using the conversion from analog to digital broadcast television as a case-study.

B. Competition, Interconnection, and Network Access

Under the scenario of moving to a one-size-fits-all network architecture for all carriers, the degree of competitive and consumer safeguards would be contingent upon the type of network technology a particular carrier uses. The FCC should be concerned about the ability of Voice-over-Internet Protocol (VoIP) providers and Competitive Local Exchange Carriers (CLECs) to continue to interconnect with Incumbent Local Exchange Carriers' (ILECs) facilities in any next generation network technology environment. Some degree of interconnection with ILEC facilities will continue to be necessary for the foreseeable future, even in an "all-IP" or next generation communications environment or during trials of the same. The Indiana Commission encourages the FCC to update its competition policies before or as part of adopting any policies to facilitate the transition to any next generation network technology.

The goal of full and fair competition, which is assumed throughout the Telecommunications Act of 1996, is the ability of competitors to interoperate seamlessly but accommodate competition and recognize the interdependence of the competitors and their networks. Consumers should not risk loss of the ability to communicate with each other as the price of switching to a new technology because their preferred CLEC or VoIP providers are being denied interconnection with the ILEC (which, in turn, prevents their calls from going through).

It may be helpful – at least in some cases – for the FCC to consider the transition from Time-Division-Multiplexing (TDM) technology- to IP-based networks as a continuing evolution of the existing networks, rather than the total replacement of one network by a second network or as the maintenance of two separate networks. This is particularly true given that many competitors' services, including some wireless and IP-based services, currently rely on the ILECs' underlying physical TDM facilities to complete the connections necessary for the provision of those services, including last mile and interconnection inputs.

The IURC does not have access to the highly granular (often route- or building-specific) data needed to evaluate the impact on competitors of discontinuing TDM-based services. However, the FCC should carefully consider this critical public policy issue. This consideration should include a robust data collection effort to determine the extent to which any particular type of network technology transition would create a competitive disadvantage. The Indiana Commission is not suggesting that the FCC develop a model; rather that it gather the necessary raw data for decision-making purposes.

The issues of network access and interconnection, which are among the most pressing in today's communications world, are important in both the circuit-switched and IP worlds. Relying solely on the communications industry to "work out" differences regarding interconnection rights and responsibilities would be unwise because it would ignore the differing degrees of leverage that various parties may bring to the negotiating table. Larger carriers and providers have significant advantages that could result in harm to consumers, or to the competitive environment. The FCC must be diligent in protecting the interests of both.

The FCC should examine how recent policies may influence carriers' decisions to move to newer network technology. Under the FCC's Transformation Order, all telecommunications traffic, regardless of volume, distance traveled, technology used to transport it, not to mention the cost of transport, will eventually be subject to a bill-and-keep regime, eliminating intercarrier compensation payments entirely. In the Internet world, carriers also engage in paid intercarrier compensation when there is an imbalance of traffic. This may create perverse incentives for some carriers affected by traffic imbalances to avoid upgrading to next generation network technology for as long as possible, in order to take advantage of the bill-and-keep regime applicable to existing network technologies. It is also entirely possible that some carriers' business plans may not envision moving to all-IP. The Indiana Commission encourages the FCC to adopt policies on network technology transition that are flexible, but also technology- neutral.

C. Universal Service

The communications field has been characterized by many significant changes in the U.S. since the passage of the Telecommunications Act of 1996 – changes in technology, changes in industry structure, and changes in the legal and regulatory environment. Focusing too much on the changes, however, can obscure the fact that many things have not changed. Under federal law, “quality service” and universal service should still be made available at “just, reasonable, and affordable rates.”

“Consumers in all regions of the United States, including low-income consumers and those in rural, insular, and high-cost areas...” should still have access to telecommunications and information services and rates that are “...reasonably comparable...” to those in “...urban areas.”⁶ This is still the law of the land. Additionally, the FCC should not assume that consumer expectations will automatically change simply because of a change in technology. Regardless of the technology, consumers still expect, and have a right to expect, high quality voice service that is universally available at reasonable prices. In its deliberations, the FCC should think very carefully before adopting a policy that in effect may leave the United States with a system where service is not universal.

Availability, affordability, customer choice, consumer protection, and a competitive but seamlessly interconnected communications industry remain viable public policy goals no matter what else changes. There are several vehicles for ensuring the availability, affordability, and reasonable comparability provisions of the law are carried out – including (but not limited to): ETC requirements, Carrier of Last Resort requirements, and federal and state universal service funding mechanisms.

III. Conclusion

The Indiana Commission readily acknowledges that the debate raised in this proceeding originates in significant part from customer migration to new and established providers responding to the market place with new technology. We must simply be careful to avoid inadvertently closing off existing options and policies which customers depend on, or may come to depend on.

The IURC supports the transition from TDM- to IP-based or other next generation networks and services. Indeed, there can be many benefits to consumers from this transition. However, great care must be taken to ensure the continuation of the competitive marketplace. There are opportunities for those with scale and scope to leverage their positions in negotiations. This could result in a reduction in competition, leaving customers subject to prices and/or rates that are not just, reasonable, and affordable, with little or no competitive recourse.

The Indiana Commission urges the FCC to avoid taking any approach where the interests of individual consumers and the terms and conditions by which networks are connected hinge

⁶ 47 U.S.C. 254(b)(3).


largely on the discretion of any individual industry participant, regardless of which one. As Adam Smith offered 237 years ago, industry participants, as they should in a competitive environment, will always advance their own self-interests⁷, which is why the FCC must remember that the sum of all the "self-interests" does not necessarily equal the "public interest." Whatever approach is decided upon must fulfill the statutory cornerstones of consumer protection, competition, and universal service.

The Indiana Utility Regulatory Commission appreciates the opportunity to offer its comments on the issues raised, inter alia, by AT&T and NTCA petitions and we look forward to continuing dialogue with the FCC, other state commissions, industry, and consumer representatives to move forward in encouraging network technology transition in a technology-neutral manner, while protecting the interests of consumers and promoting competition.

Respectfully submitted this 28th day of January, 2013

INDIANA UTILITY REGULATORY COMMISSION


James D. Atterholt, Chairman


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⁷ Adam Smith, The Wealth of Nations, 1776